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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,783	10/04/2000	Nicholas W. Dawes	551P08US-1	6059
20779	7590	03/03/2005	EXAMINER	
SHAPIRO COHEN			DUONG, FRANK	
P.O. BOX 3440			ART UNIT	PAPER NUMBER
STATION D			2666	
OTTAWA, ON K1P6P1				
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/678,783	DAWES ET AL.
	Examiner Frank Duong	Art Unit 2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 October 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 11-16 is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

1. This Office Action is a response to communications dated 10/06/04. Claims 1-17 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Grau et al (USP 5,910,803) (hereinafter “Grau”).

Regarding **claim 1**, in accordance with Grau reference entirety, Grau discloses a method for determining a routing for packets in a network of network objects, said method (Figs. 7A-7B and col. 8, line 11 to col. 11, line 60) comprising:

- a) dividing said network into WAN (Wide Area Network) segments and LAN (Local Area Network) segments (col. 8, line 11- col. 9, line 43);
- b) determining a routing for packets through each segment (col. 13, lines 6-13; *Route tracing*);
- c) combining said routing determined for each segment in step b) to obtain a total routing through the network (col. 13, lines 14-20).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step a) includes determining which

network objects (*AtlasPage objects*) are routers (*col. 8, lines 62-67*) and which network objects (*AtlasNode objects*) are non-routers (*col. 8, lines 51-61 and col. 9, lines 12-18*).

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales discussed above), Grau further discloses partitioning non-router network objects into discrete LAN segments, each LAN segment being a collection of connected non-router network objects separated from other non-router network objects by at least one router (*col. 8, lines 51-61 and col. 9, lines 12-18 and col. 11, line 61 to col. 34 and thereafter*).

Regarding **claim 4**, in addition to features recited in base claim 2 (see rationales discussed above), Grau further discloses partitioning routers into WAN segments, each WAN segment being a collection of connected routers separated from other routers by at least one non-router network object (*col. 8, lines 51-67 and col. 11, line 61 to col. 34 and thereafter*).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each WAN segment a sequence of routers a packet passes through from a source router to a destination router in the WAN segment (*col. 13, lines 6-20*).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each segment which non-router objects a packet passes through from a source non-router to a destination non-router in the LAN segment (*col. 13, lines 6-20*).

Regarding **claim 7**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step b) is executed from a plurality of beacons located at different points in the network (*col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited*).

Regarding **claim 8**, in addition to features recited in base claim 6 (see rationales discussed above), Grau further discloses wherein step b) include reading a table of source addresses (*topology database*) at each non-router network object in each LAN segment, said table containing source addresses of packets which transit through said non-router network object (*col. 8, lines 40-43 and thereafter*).

Regarding **claim 9**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) is accomplished using a previously determined topology of the network (see *col. 13, lines 16-20*).

Regarding **claim 10**, in addition to features recited in base claim 5 (see rationales discussed above), Grau further discloses wherein the sequence of routers a packet passes through is determined from a plurality of beacons located at different points in the network (*col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited*).

Allowable Subject Matter

3. Claims 11-16 are allowed.

4. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter: please see Office Action dated 07/06/04 for reasons for the indication of allowable subject matter.

Response to Arguments

6. Applicant's arguments filed 10/06/04 have been fully considered but they are not persuasive. Applicants' arguments will be addressed hereinbelow in the order in which they appear in the response filed 10/06/04.

In the Remarks of the outstanding response, on page 9 and thereafter, pertaining the rejection of claim 1 as being anticipated by Grau et al patent, Applicants argue "*Applicant respectfully submits that the Grau et al. patent is a mapping tool that simply maps network topology and therefore is unrelated to the present invention ... patent does not anticipate the subject matter of independent claim 1*".

In response Examine respectfully disagrees and asserts the Grau et al. patent discloses the claimed invention and the Office Action does indeed clearly layout the claimed limitations corresponding to that disclosed by Grau et al. In the specification on page 1, Field of the Invention and thereafter clearly states the present invention relates to methods for determining the route of packets through a network. In doing so, the "traceroute" is used. Grau et al patent, as clearly pointed out in the Office Action,

does just that. To supporting the argument, Applicants assert "*The problem solved by the present invention is the determination topology of a network, which is performed by determining paths between two objects*" and refer the Examiner passage of the present specification, on page 7 and forcefully attack the Grau et al patent with a statement of "The Grau et al. methodology and system does not actively seek out to solve ambiguities in the routing paths of packets". Examiner again respectfully disagrees for the following rationales:

- a. First, In response to applicant's arguments, the recitation "determining paths between two objects" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).
- b. Second, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*actively seek out to resolve ambiguities in the routing paths of packets*") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are

not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

c. In the present condition, the claims are clearly anticipated by Grau et al patent as discussed above.

Examiner believes an earnest attempt has been made in addressing all of the Applicants' arguments. Due to the amendment fails to place the application in a favorable condition for allowance, the rejection from last Office Action is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frank Duong
Primary Examiner
Art Unit 2666

February 25, 2005